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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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07/933,891 08/24/92 NILSSEN

RATLIFF, EXAMINER

BSM2/1119

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BARRINGTON, IL 60010

ART UNIT	PAPER NUMBER
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2502

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DATE MAILED: 11/19/93

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☒ Responsive to communication filed on 8/24/92 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), 0 days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> |

Part II SUMMARY OF ACTION

1. ☒ Claims 47-55 are pending in the application.
Of the above, claims _____ are withdrawn from consideration.
2. ☒ Claims 1-46 have been cancelled.
3. ☐ Claims _____ are allowed.
4. ☒ Claims 47-49 and 51-55 are rejected.
5. ☒ Claims 50 are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed _____, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. _____; filed on _____.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

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EXAMINER'S ACTION

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The submission of pre-amendment E is acknowledged and has been fully treated.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 51, 52, 54 and 55 are rejected under 35 U.S.C. § 102(b) as being anticipated by Dale et al. Dale shows in the fig.3 block diagram of his solid state ballast; rectifier means, inverter means (see switching network), current limiting means (see unlabelled capacitor), and connect means connecting the ballast output terminals to the lamp. Further, Dale et al. teaches the recited, "base means operable to be inserted into and held by an Edison-type lamp socket" at page 21 column 1. With regard

to independent claims 51 and 52 the functional limitations found therein beginning with the passage, "...fundamental period consisting of four time segments:..." are seen as being inherent functions of the Dale et al. device as there is no additional

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positive structural recitation (outside those already enumerated as disclosed by Dale et al.) to account for the recited resulting waveshape of the inverter voltage. Claims 54 and 55 which are dependent upon the functional constituent of independent claim 52 are likewise rejected.

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 47-49 and 53 are rejected under 35 U.S.C. § 103 as being unpatentable over Dale et al. in view of Canup U.S. Patent No. 3,706,052. Dale et al. shows all the structural features as cited in the 102 rejection above, but does not explicitly teach the two transistor inverter arrangement of the instant claims. This arrangement is notoriously old and is disclosed by Canup (in Fig.3 - see structures 27 and 28) in a ballasting construction utilizing an output transformer similar to that of Dale et

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al. It would have been obvious to one of ordinary skill in this art to utilize the inverter arrangement of Canup in the device of Dale et al. for the reduced transistor power dissipation that would result from the combination (see Canup col.2 lines 1-7).

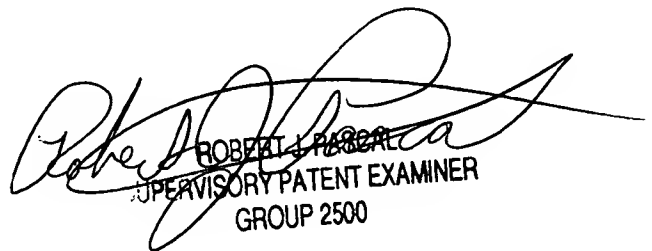
The recitations of claims 48,49 and 53 regarding the magnitude of the voltage at the control terminals of the inverter transistors, and the magnitude of the inverter voltage itself are seen as obvious, since it has been held that discovering an optimum value of a result effective variable requires only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Claim 50 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reginald A. Ratliff whose telephone number is (703) 308-4904.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Ratliff/rr


ROBERT L. RATLIFF
SUPERVISORY PATENT EXAMINER
GROUP 2500